## **Empowered Learner (EL) Glossary Terms**

Standard: EL1 - Students leverage digital tools and strategies to take an active role in choosing and achieving their learning goals.

**EL1.a Articulate and set personal learning goals:** Age appropriate opportunities for students to have a say in their learning goals and make choices on how to meet them.

**EL1.a Learning process:** Recognize and evaluate the steps taken to meet learning goals - What worked? Why did things unfold as they did? What could be approached differently? What will you do differently in the future?

**EL1.b Build networks:** Enrich learning by making online connections with other learners and experts for personal or academic interests, for example, via social media, connecting through email, video conferencing, digital pen pals, etc.

**EL1.c** Customize: Choosing and making changes to meet Universal Design for Learning, and accessibility for example, by using audio, video and dynamic glossaries, highlighting, note taking, voice command, text to speech, social bookmarking, cloud collaboration tools.

**EL1.c Learning environments:** Local, physical and online environments, both formal and informal.

**EL1.d Use technology to seek feedback:** Seek digital or human feedback, for example, via spell check and grammar check tools, online search, learning analytics programs that measure how time is spent on a problem or identify specific challenge areas, collaborative spaces that allow others to give feedback, reaching out to experts for input.

Standard: EL2 - Students leverage digital tools and strategies to take an active role in choosing and achieving their learning goals.

**EL2.a Demonstrate their learning in a variety of ways**: Create artifacts to show how students have met their learning goals, for example, digital posters, blogs, digital stories, assessments, e-portfolios, project showcase, research paper and works of art.

**EL3.a Fundamental concepts of technology operations:** Basic knowledge of how to use devices and software applications.

**EL3.a Troubleshoot technologies:** Able to solve technical problems, for example, restart a device, install software updates, transfer work from one device to another and troubleshoot when audio/video won't play.

**EL3.a Transfer knowledge:** Apply prior technical and experiences to figure out how new technologies or applications work.

**EL3.a Emerging technologies:** New digital tools and technologies that have potential to enhance the learning process.

#### **Digital Citizen (DC)**

Standard: DC1 - Students recognize the rights, responsibilities, and opportunities of living, learning, and working in an interconnected digital world.

**DC1.a Digital identity and reputation:** How an individual is represented online in the public domain, based on activities, connections or tagging, for example, social media posts, photos, public online comments/reviews, awareness and monitoring of how others are depicting you online.

**DC1.a Positive behavior:** Interactions that convey a portrait of the way you want to be perceived and healthy interactions with technology itself, for example, moderating the time online or gaming, ergonomic issues and balancing use of the media with daily physical behavior.

**DC1.a Safe behaviors:** Interactions that keep you out of harm's way, for example, knowing the identity of who you are interacting with; how much and what kind of information you release online; protecting overall from scams, phishing schemes and poor purchasing practices (i.e. e-commerce theft).

**DC1.a Legal behaviors:** Interactions that are mindful of the laws, for example, abiding by copyright and fair use, respecting network protections by not hacking them and not using another's identify.

**DC1.a Ethical behaviors:** Interactions that align with one's moral code, for example, preventing or not engaging in cyberbullying, trolling or scamming; avoiding plagiarism; supporting other's positive digital identity.

**DC1.a Online or networked devices:** Internet connected computers or tablets, multi-player gaming systems and cell phones.

**DC1.b Managing personal data:** Creating effective passwords, authenticating sources before providing personal information, sharing personal data conscientiously, not posting addresses or phone number visibly.

**DC1.b Digital privacy and security:** Activate privacy settings on social media accounts and search engines, recognize sites that use encryption, secure login and password information on shared devices, read and be conscientious about accepting privacy policies and access requests from apps and website.

**DC1.b Data-collection technology for tracking navigation:** Entities that track an individual's personal data when using networked devices, for example, website cookies, search algorithms return results based on past searches, website analytics, GPS on cell phones, the "Internet of Things" when data is exchanged between networked devices and objects.

Standard: DC2 - Students will demonstrate an understanding of and respect for the rights and obligations of using and sharing intellectual property.

**DC2.b** Intellectual Property: Content of ideas created by an individual or entity, for example, music, photos, narration, text and designs.

**DC2.b Rights and obligations of using and sharing:** Abiding by copyright and fair use, citing resources, gaining and giving permission to use (content), avoiding plagiarism, understanding and using creative commons.

**DC2.c Digital Community:** An online community or also called an internet community is a virtual community whose members interact with each other primarily via the Internet.

# **Knowledge Constructor (KC)**

Standard: KC1 - Students critically curate a variety of resources using digital tools to construct knowledge.

**KC1.a Research strategies:** Using multiple sources (digital, online, print, etc), using library databases and catalogues, using advanced tools and criteria for online searches, using online bookmarking tools, using online and note-taking tools.

**KC1.a** Information and other resources: Research or other data, digital assets and media such as cell phones, clipart, videos and audio clips.

**KC1.b Accuracy:** When resources last updates or copyrighted (i.e. is it current?) sources of informations, links to other valid resources, factual correctness, URL cross-check on databases; use of .com, .org, .edu, etc.

KC1.b Perspective: Who is the source trying to reach? What is the tone and mission? Does it show indications of problematic bias?

**KC1.b Credibility:** Who wrote/published the resource and what are their credentials? How objective is the author and how reliable is the publications source? For clues, look at the domain name, affiliation, mission and vision.

**KC1.b Relevance:** Does the source meet your needs? Does it have the information you are looking for?

**KC1.c Curate:** To gather, select and categorize resources into themes in ways that are coherent and shareable.

**KC1.c Variety of tools and methods to create collections:** Note taking, outlining, citation and annotations tools, aggregating apps/platforms.

KC1.c Collections of artifacts: Portfolio, multimedia presentation, paper, project, video, demonstrations, etc.

Standard: KC2 - Students produce creative artifacts and make meaningful learning experiences from curated knowledge for themselves and others.

**KC2.a Meaningful connections or conclusions:** Learning that reflects a theme, proves a thesis or builds knowledge around an authentic topics.

KC2.b Build knowledge: Construct and expand understanding and perspectives on a topic or idea.

**KC2.b Actively exploring:** Open ended- student driven inquiry.

# **Innovative Designer (ID)**

Standard: ID.1 - Students use a variety of digital tools and resources to identify and solve authentic problems using design thinking.

**ID1.a Authentic problem:** Real-world problems, such as: design challenges, science explorations, philosophical questions, service learning projects, social issues (recycling, composting, pollution, hunger, poverty).

**ID1.b Tolerance for ambiguity:** Comfort with the unknown or uncertainty.

**ID1.b Perseverance:** Continued efforts in the face of obstacles and/or uncertain outcomes.

**ID1.b Open-ended problems:** Problems that have many or undefined solutions.

Standard: ID.2 - Students use a variety of technologies within a design process to create new, useful and imaginative solutions.

**ID2.a Deliberate design process:** A methodology for problem-solving; a series of steps used to solve a problem and design a solution. For example, human-centered design process, project-based learning, engineering design processes, scientific method.

**ID2.a Innovative artifacts:** Artifacts created by new methods, original thinking or improvements to an existing artifact. For example, 3D artifacts, computer programs, robotics, simulations, virtual representations, prototypes, etc.

**ID2.b Digital tools:** Brainstorming tools, flow charts, drawing or mark up tools, 2D or 3D design software, note-taking tools, project-management tools.

**ID2.b Design constraints:** Time, money, expertise, materials, conditions and potential obstacles.

**ID2.b Calculated risks:** A decision made after careful estimation of the probable outcome.

**ID2.c Prototypes:** A first or preliminary model of something from which other versions are developed or copied.

**ID2.c** Cyclical design process: An iterative process of testing, reflection, refinement, etc. For example, alpha and beta testing.

# Computational Thinker (CT)

Standard: CT1 - Students develop and employ strategies for understanding and solving problems.

**CT1.a Algorithmic thinking:** The ability to develop precise instructions or sequences that form the basis for algorithms. (Getting to a solution with clear steps)

**CT1.b Collect data:** Surveys, online data sets, physical measurements.

**CT1.b Identify relative data sets:** Could be big data, public access information, or private databases, for example, population or global food source databases, public data streams for weather satellites.

**CT1.b Analyze data:** Making sense of data, identifying patterns and drawing conclusions, for example, using databases, visualization tools, analytics, mapping software, text analysis software.

CT1.b Represent data: Depicting and organizing data in appropriate graphs, charts, words or images.

# **Creative Communicator (CC)**

Standard: CC1 - Students communicate clearly and express themselves creatively for a variety of purposes using the platforms, tools, styles, formats, and digital media appropriate to their goals.

**CC1 Platforms:** Mode of delivery, for example a blog, video slide deck presentation, digital poster, social media site, podcast, website or other online tool.

**CC1.a** Tools: Digital cameras or video, audio software, graphic design software, writing software.

**CC1.b Responsibly repurpose or remix:** Changing the way something was originally used or combining original assets in a unique way and, as needed seeking permission to use content from the author/creator and using proper attribution.

**CC 1.b Communicate complex ideas:** Deconstruct information and/or data and synthesize so it is more simply conveyed to increase understanding. For example, use of metaphors, compare/contrast, categorization.

**CC1.c Digital objects:** Any product, asset or artifact that is digital.

Standard: CC2 - Students publish and present content customized for their audience(s), purpose, and task.

**CC2.a Customize message and medium appropriate to the audience:** Identify both message (content) and medium (mode of delivery) to successfully convey ideas or creations to various audiences, for examples, peers, parents and community members.

# **Global Collaborator (GC)**

Standard: GC1 - use digital tools to broaden their perspectives and enrich their learning with culturally responsive practices by collaborating and working effectively with local and global teams.

**GC1.a Digital tools to connect with learners:** Use tools, such as video conferencing, chats, virtual field trips, multiplayer online game, email and social media, to connect with other students from around the world.

**GC1.a Engage to broaden understanding and learn:** Connected global learners know to how to respectfully reach out, listen and work with others from different cultures to meet specific learning objectives, for example, engaging with digital pen pals, telecollaborative global projects, social action projects, translation software/apps, synchronous/asynchronous collaborative platforms, open-education resources and school global partnerships.

**GC2.a Collaborative technologies:** Applications that facilitate teamwork and collaboration between students and experts around the globe, for example, knowledge sharing tools, videoconferencing, digital project spaces/sites, chats, collaborative schedulers.

**GC2.a Examine issues from multiple viewpoints:** Engage in conversations and debate through the lens of different cultural, geographic, demographic and personal perspectives, such as online debates, discussion forums, telementoring and personal learning networks.

**GC1.b Contribute constructively:** Facilitate or engage in collegial feedback, manage timelines and scope of project, engage team decision-making, contribute in ways that are measurable.

Standard: GC2 -Students use digital tools to connect with a global network of learners and engage with issues that impact local and global communities.

**GC2.a Assuming various roles and responsibilities:** Practice communication skills by experiencing different roles, for example, team lead, subject-matter expert, beta tester, timekeeper, notetaker or scheduler.

GC2.b Explore local and global issues: Virtual field trips, research projects, e-pals and action projects using digital tools.

**GC2.b Investigate solutions:** The ability to address and potentially solve significant problems in students' communities and around the world, both independently and in-collaboration with others.